PONY

سلسلة كتب الأستاذ

ICT

5th Final Revision

Primary

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Summary Unit 1 Final Revision

Lesson 1

- **External Hard Drive:** Like HDD, but much faster, It connects directly to the computer ports
- **Ethernet Cable:** It connects a computer or laptop to a router.
- **Ethernet Port:** It connects an Ethernet cable.
- **Ethernet** is more stable and faster than Wi-Fi.
- **Router:** It is a device that connects a computer to the Internet via Ethernet or Wi-Fi.
- **HDMI:** It transmits audios and videos from/to devices.

1 Bit	The smallest unit of data	0 or 1
2 Byte	1 Byte = 8 bits = 1 character	"Cat" = 3 characters = 3 bytes
3 Kilobyte (KB)	1 KB = 1024 B	
4 Megabyte (MB)	1 MB = 1024 KB	
5 Gigabyte (GB)	1 GB = 1024 MB	
6 Terabyte (TB)	1 TB = 1024 GB	

- **Megabits per second (Mbps):** It measures the speed of a network or the Internet connection.
- **GigaHertz (GHz):** It measures the number of cycles your CPU carries out per second.

Problem	Reason	Solution
1 Trouble processing large files (Like a large PowerPoint presentation)	• Not enough graphics storage	• Shut down some programs.

2 Not able to store files	• Not enough space	• Move old files to an external drive.
3 A poor video-conference connection	• Slow wireless Internet connection	• Try an Ethernet connection.
4 The home Internet connection is not working.	• Connection interrupted	• Use the Ethernet or contact your ISP. (Internet Service Provider)

Lesson 2

- **Networks:** They are groups of people or things that are connected to each other for a common purpose.
- **Local Area Network (LAN):**
  It connects computers inside a house or a small office
  - It can also connect printer and router.
- **Internet:** It connects millions of computers from all around the world.
  - To connect a computer to the Internet, we need a gateway, such as a router.
- **Router:** It connects your computer to an ISP to provide Internet access.
- **The ISP:** It is a company that provides the Internet service to the customers.
- **Example of a useful website:** Egyptian Knowledge Bank.
- **Open Network:** It is open and accessible to all, such as (Internet - WWW).

Lesson 3

- **Closed Network:** It is a private network such as (**Internet** – **School computer lab**)
- We use closed networks to share private information.
- We use open networks to share public information.
- **Internet of Things (IoT):** can connect digital devices to the Internet using Wi-Fi
- IoT allows you to control devices such as Bluetooth speakers from anywhere.
- IoT is useful for people of determination.

Lesson 4

- Scientists use office programs, email and video conference to share their discoveries with other.
- **Five steps to solve computer Problems:**
  1. Identify the problem.
  2. Plan solutions.
  3. Try the solutions.
  4. Review.
  5. Ask for help.

Problem	Solution
1 The computer slows down when opening an app.	• Shut it down and restart it. • Check for software updates. • Delete unwanted apps.
2 The browser is running slow.	• Check the Wi-Fi signal. • Make sure apps are up-to-date on your device.
3 No Internet connection	• Use the software to troubleshoot your Wi-Fi connection. • Check that the router is connected. • Restart your router. • Try a new Ethernet cable. • Contact the customer service of your ISP for help.
4 Slow to download	• Restart your computer and router. • Check the Internet speed.

Lesson 5

- There are many ways to find information, such as QR Codes, libraries, the trusted websites.
- Input devices such as:
  1. Keyboard.
  2. Microphone.
  3. Scanner.
  4. Web Camera.

- **Storage Devices** such as:
  1. **Hard Disk Drive (HDD):** The main place for saving files on computer, it has a very large storage capacity.
  2. **Flash Memory:** A small portable device, used to save and transfer files to another device.

- **File Management:** It means creating folders and putting each type of file in the right place. This makes it easy to find files quickly.
- **Create the main folder:**
  - Press the right click >>> New >>> Folder
  - Then, type a name for the folder.
- A main folder can contain one or more subfolders.

Lesson 6

- **Intranet:** It is used to share information in a closed network, and it's more secure such as : school or home network.
- **Internet:** It is used to share information over the web in an open network, so it's less secure.
- **Note:** Don't share personal information such as your full name, home address, or phone number on the Internet.
  1. **Sorting information in Excel:**
     - Go to the toolbar and click on "Data", then click on "Sort".
  2. **Setting formulas in cells:**
     - Type (=) in this cell. This tells Excel you are creating a formula.
     - You can set formula to add (+), subtract (-), multiply (x), or divide (/).
- In Excel, a cell is named using a combination of a letter and a number.
- The letters are at the top of the columns and the numbers are on the left side of the row.

Summary Unit 2 Final Revision

Lesson 1

- You should share less personal information online.
- Personal information: It includes your name, address, date of birth, and passwords.
  1. Use strong passwords that are different and contain letters, numbers, and special signs.
  2. Use antivirus software on all of your devices.
  3. Update your devices regularly.

- You should protect your files from viruses, software problems, human errors.
- How to back up your data?
  1. Some apps and software programs back up data automatically.
  2. You can manually use a data-storage device, such as:
     - A flash memory
     - An external hard drive
- The hard disk has more space than the flash memory.

Lesson 2

- Phishing: It is sending a message via email or social media applications that looks real but isn't.
- Smishing: It is the same as phishing, but it is a text message instead of an email.
- How to identify phishing messages?
  1. They include misspelled words and grammar errors.
  2. They request too much personal data.

Password manager:

1. It creates strong and unique passwords for each of your accounts.
2. It also tells you if the passwords you already have are too weak or if you've reused them.
3. It can even tell you if one of your passwords has been stolen online.

Multi-factor authentication (MFA):

- MFA is used to strengthen your passwords.
- You provide at least two ways of identifying yourself.

Lesson 3

There are many types of scam websites, such as:

1. Online shopping scams: They never send you the correct items you bought.
2. Scareware scams: They say your computer has a problem and you need to download something.
3. Sweepstakes scams: They offer you a prize that never comes.

How to avoid scam websites?

1. Check that the URL of the website is credible.
2. Scam websites usually contain misspellings or bad grammar.
3. Search online to see if it is a known scam.

If you are a victim of a scam website:

1. Report it. Tell a trusted adult.
2. Contact the Child Helpline or The General Department for Combating Internet Crimes.

All URLs are made up of three main parts:

1. The protocol
2. The resource name
3. The file path

Lesson 4

- Copyright protects creators' work.
- The international symbol for copyright is ©.
- When you use copyrighted content:
  1. Ask for permission to use it.
  2. Credit the sources.
- Creative works that are NOT covered by copyright:
  1. Works in the public domain
  2. Facts
  3. Official documents, such as laws
  4. Discoveries
  5. Creative works whose owner has been dead for 50 years

- Public domain and Creative Commons do not fall under copyright.
- Public domain: It includes all creative works that are not covered by copyright law.
- Creative Commons: It means that the owner of a creative work gives permission to reuse their work anytime and anywhere.
- There are two ways to use the writings of others:
  1. Use the exact words without changes (direct quotation).
  2. Paraphrase ideas in your own style.

Lesson 5

- Facts and Opinions:

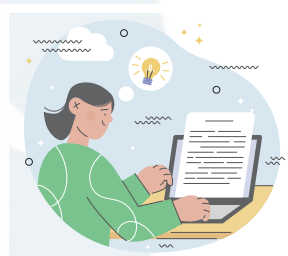
Facts	Opinions
1 They come from research and observations.	1 They are based on someone's views and experiences.
2 They can be proven.	2 They cannot be proven.
3 They cannot be debated.	3 They can be debated.
4 They are true for everyone.	4 They are not true for everyone.

- If two online sources have the same information, it often means that the information is a fact.

- Online sources include maps, graphs, tables, and charts.
- The EKB is the best way to find reliable digital sources.

Lesson 6

1. Write notes in your own words, including the author's name and URL.
   - If you copy exact words, put them between quotation marks " ".
2. Paraphrasing: It's using your own words to explain the ideas of the writer (author). For every quote, explain where it came from (the source) and why you used it.



- Ways of doing paraphrasing:
  1. Change some of the vocabulary words.
  2. Change the order of the ideas.
  3. Change the sentence structure.
- Using quotes: State the source of the quote.
- Citing sources:
  - At the end of your research, list your sources on a 'Works Cited' page.
- When you cite a source, the citations should be in alphabetical order.
  1. If the source has an author:
     - The citations should be ordered by the author's last name.
  2. If the source doesn't have an author:
     - The citations should be ordered by the title of the article.
       a. Write the source: The name of the book, journal, or website.
       b. Write the date: The year the source was published.
       c. Mention the URL.
- When citing a YouTube video, use the uploader's name as the author (creator) of the video.

Questions Final Revision

1 Choose the correct answer from the following:

1. When unable to store files, the best solution is to .....
   a. Delete apps
   b. Move old files to external drive
   c. Restart
   d. Turn off Wi-Fi
2. ..... is a cable used to transmit audio and video
   a. Ethernet b. Wi-Fi c. HDMI d. both a and b
3. .....is very fast and like a USB or SSD.
   a. HDMI b. network c. port d. Flash memory
4. The ..... is used to insert images and use them later.
   a. keyboard b. printer c. microphone d. scanner
5. You can organize files on your device using ..... .
   a. Folders b. Copy c. Paste d. Limited space
6. We can create a main folder and add ..... to it.
   a. sub-folders b. printer c. delete folder d. speakers
7. ..... tells you if one of your passwords has been stolen online.
   a. A password manager
   b. MFA
   c. PIN
   d. A scam
8. All of the following ways can secure your personal information except .....
   a. Limit personal information you share on the internet
   b. Using strong password that contains letters, numbers, and symbols
   c. Use anti-virus
   d. Share your name and address with all websites that ask for it
9. You must use ..... passwords for the websites that you use.
   a. short b. different c. expected d. similar
10. Smishing is the same thing as phishing, but it is sent by ..... .
    a. an email b. a text message c. Facebook d. none of them
11. Passwords are reinforced and strengthened through ..... .
    a. phishing
    b. multi-factor authentication
    c. deleting programs
    d. creating an account

12 A password manager checks if the passwords are ..... .
a. weak b. stolen c. reused d. all of them

13 If there is no internet connection, you can .....
a. Restart router b. Contact ISP
c. Try new Ethernet cable d. All of them

14 The unit "GHz" is used to measures .....
a. File size b. CPU speed
c. Network bandwidth d. Internet data

15 A drive like HDD but faster and external is called .....
a. Flash b. External hard drive
c. Modem d. SSD cable

16 A video conference may be poor because of .....
a. Slow Wi-Fi b. No RAM c. Keyboard error d. Router speed

17 To solve slow download problems, you can .....
a. Restart the router b. Check internet speed
c. Restart computer d. All of them

18 To keep your data safe, use ..... programs on all your devices.
a. social media b. antivirus c. browser d. MS Excel

19 ..... is the main storage location inside the computer.
a. Flash memory b. HDD c. QR Code d. Router

20 To multiply the values in cell A8 and cell B8 the correct formula is .....
a- =A+4B4 b- =A8*B8 c- =A4/B4 d- =A-8B+8C4

21 Cell A9 in Excel refers to ..... .
a. column A and row 9 b. column A
c. the nine row d. row A and column 9

22 Multi-Factor Authentication (MFA) is.....
a. Using one way of identifying yourself
b. Using at least two ways of identifying yourself
c. Never identifying yourself
d. Providing weak password

23 The flash memory usually has ..... space than the hard disk.
a. more b. less c. the same d. none of them

24 ..... your devices regularly keeps your data safe.
a. Uploading b. Updating c. Deleting d. Restarting

25 To arrange information alphabetically in Excel, go to the toolbar, and click on "Data", then click on "……".
a. Layout b. Format c. Sort d. Save

26 To sum the values inside columns A, B, C in row 3 the correct formula is ……
a- =A1+B2+C3 b- =A1+B2 c- =A3+B3+C3 d- =A1+A2+A3

27 …… means making another copy of your work to keep it safe.
a. Copyright b. Backup c. Save d. flash memory

28 A LAN connects computers within ……
a. a home b. small offic c. The world d. Both a and b

29 …… is the global network that connects millions of computers worldwide .
a. LAN b. Intranet c. Internet d. Gateway

30 The company that provides internet services to users is called ……
a. ISP b. CPU c. HDD d. LAN

31 An open network that anyone can access is ……
a. Intranet b. Closed network c. Internet d. Private LAN

32 A school computer lab network is an example of ……
a. Open network b. Closed network c. Internet d. Global system

33 Internet of Things (IoT) allows you to connect digital devices using ……
a. Wi-Fi b. USB c. Ethernet d. Bluetooth only

34 Businesses use …… networks to share private information.
a. Open b. Closed c. Public d. Global

35 Intranet is …… network
a. open b. closed c. private d. both b and c

36 The first step in solving computer problems is to ……
a. Ask for help b. Identify the problem
c. Review d. try solutions

37 A solution for a browser running slowly is to ……
a. Check Wi-Fi signal b. Replace monitor
c. Buy printer d. Delete folder

38 The …… is used to share in a closed network and is more secure.
a. camera b. intranet c. word d. photo

39 The letters A, B and C in Excel program refer to ..... .
a. row titles b. column headings
c. cell titles d. keyboard

40 You can protect your files from viruses or loss by creating ..... .
a. device shutdown b. backups
c. personal data d. none of them

41 We use ..... program to create a simple formula and graph.
a. PowerPoint b. Excel c. Windows d. Paint

42 Scareware websites are .....
a. Includes fake warnings about a computer problem
b. Sites offering you a fake prize
c. Shopping sites d. Trusted sites

43 Passwords must be ..... for each website you register on.
a. similar b. weak c. easy d. different

44 Phishing is .....
a. Sending a text message.
b. Sending a message via email or social media.
c. Making fake phone calls. d. Spying on calls.

45 ..... helps to do mathematical equations
a. Paint program b. Viruses program
c. Excel program d. Operating system software

46 ..... is a network used to share information, and is less secure.
a. Email b. Internet c. Intranet d. Network

47 When arranging information alphabetically in Excel, go to the ..... .
a. copying b. toolbar c. layout d. cells

48 All of the following are works not covered by copyright, except .....
a. Works classified as public domains
b. Creative work that owner has died 50 years ago
c. Facts
d. Works that have international symbol of copyright

49 The smallest unit of data is called .....
a. Byte b. MB c. Bit d. TB

50 When documenting the source of the research quoted from YouTube, we use..... as the author
a. The name of the video uploader ..... .
b. The name of who watched the video
c. The name of YouTube owner
d. The name of who deleted the video

51 Ethernet is ..... than Wi-Fi.
a. Slower b. More stable c. Faster d. Both b and c

52 The cable that connects a computer to a router is called .....
a. HDMI b. Wi-Fi c. Ethernet cable d. ISP

53 A device that connects computers to the internet through Wi-Fi or Ethernet is called .....
a. Modem b. Router c. Flash memory d. CPU

54 If you fall victim to a scam website, you must do .....
a. Don't tell anyone about that b. Deal with them more
c. You must report what happened d. You must trust that site

55 1 Kilobyte = ... Bytes.
a. 1024 b. 100 c. 512 d. 64

56 Opinions are .....
A- Can't be debated
C- Based on person's view and experience
B- Came from observation and research, can be proven
D- Can be proven

57 The unit used to measure internet speed is .....
a. GHz b. MB c. Mbps d. GB

58 Public domains and creative commons are .....
a- Online resources not covered by copyright
b- Sources can't be used without owner permission
c- Online resources covered by copyright
d- Take the international symbol of copyright

59 The device that stores and transfers files between computers is .....
a. Scanner b. Flash memory c. Router d. Monitor

60 The references in a 'Work Cited' list are usually sorted by the author's ..... .
a. first name b. last name c. birth date d. age

61 At the end of the research report, you cite your sources on ..... page
a- Outer cover b- Index
c- List of cited works d- Inner cover

62 The correct order of data units from smallest to largest is .....
a. Bit – Byte – KB – MB – GB – TB b. Byte – Bit – MB – GB – TB
c. KB – Bit – MB – TB – GB d. TB – GB – MB – KB – Byte

63 A group of connected computers and devices for a common purpose is called .....
a. Internet b. Database c. Network d. Router

64 Facts are .....
a- Came from observation and research, can be proven
B- Can't be proven
C- Based on person's view and experience
D- Can be debated

65 A list of sources at the end of a report is organized .....
a. randomly b. alphabetically c. by the date d. both a and b

66 A ..... is a highlighted word or picture you click on to take you to another web location.
a-.title of the article b. Quotes
c. Works Cited d. permalink

67 Research should primarily focus on ..... .
a. reliable data b. facts c. opinions d. both a and b

68 Reliable digital sources include ..... .
a. graphs b. tables c. maps d. all of them

69 When using copyrighted content, you should ..... .
a. ask for permission b. credit the source
c. commit piracy d. both a and b

70 Grouping similar files into dedicated folders is called ..... .
a. data backup b. network setup
c. file management d. software installation

2 Put (✓) or (✗) in Front of the following sentences:

1. You should ignore software updates to keep computer stable. (....)
2. A flash memory cannot transfer data to another device. (....)
3. Ethernet cable is connected in devices to holes called ethernet port. (....)
4. Closed networks are accessible to everyone. (....)
5. Website copyrights are usually shown at the bottom of the home page. (....)
6. Internet of Things connects devices using wires only. (....)
7. To avoid scam websites, you should search for them online to ensure they are trusted. (....)
8. Using Ethernet make video conferencing more stable. (....)
9. A QR code is used to get information quickly. (....)
10. Trusted website has spelling errors. (....)
11. Facts are based on a person's views and experiences. (....)
12. The main folder can contain one or more subfolders. (....)
13. It is preferable to give each folder an appropriate name. (....)
14. To create a new folder, left-click on an empty space. (....)
15. To avoid scam websites, you must check the uniform resource locator. (....)
16. Creative Commons is when the creator of a work gives permission to reuse his work at any time. (....)
17. When the source is a YouTube, the author's name is the person who uploaded the video (....)
18. An operating system does not allow you to add a sub-folder inside a main folder. (....)
19. Updates often close weaknesses that hackers may use. (....)
20. Creative works protected by copyright are works that are classified as public domains and facts. (....)
21. We use charts, tables, and maps to get measurable facts. (....)
22. Using a flash memory and an external HDD is considered a more secure way to save your files and create backups. (....)
23. Phishing messages are free from grammar errors. (....)
24. The international copyright symbol is the letter C with a circle around it © (....)

25 When you quote something, you must identify its source and the reason for using it. (....)

26 In Excel , the cell is named using a combination of a letter and a number. (....)

27 One of the types of multi-factor authentication is when you log into your accounts from another device. (....)

28 Even if hackers steel your password, they can access your account without the code. (....)

29 The school computer lab is a type of intranet. (....)

30 You should use multiple sources during your research to ensure you know all the important facts. (....)

31 The ISP provides internet service to customers. (....)

32 Copyright law protects both print and digital content. (....)

33 IoT allows devices to connect through Bluetooth and Wi-Fi. (....)

34 Phishing/scam websites try to invade your privacy by obtaining your personal information. (....)

35 When using copyrighted images, don't mention the link to the original version of the image. (....)

36 Online resources use a permalink to the site they are quoted from. (....)

37 Internet of Things is not useful for people of determination. (....)

38 One of the ways of online phishing/scam is to offer fake rewards and prizes. (....)

39 Scientists use Word, Excel, and PowerPoint in their research. (....)

40 Restarting the router can fix "no internet" problems. (....)

41 Checking Wi-Fi signal helps when the browser runs slow. (....)

42 The first step in problem solving is to review the solution. (....)

43 Scareware includes fake warnings about a problem with your computer. (....)

44 Opinions are the result of research and observation and can be proven. (....)

45 You can contact your ISP when internet is down. (....)

46 Restarting the computer can solve slow app issues. (....)

47 To obtain reliable digital sites, it is preferable to follow the sites suggested by your teacher, such as the EKB. (....)

48 Sharing information via Intranet is more secure. (....)
49 A backup must be created for important data to prevent data loss on your device. (....)
50 It's preferable to register on websites that ask for too much personal information. (....)
51 The cell f7 is located in column (7) and row (F). (....)
52 To access a website, type the URL in the search engine. (....)
53 Changing some vocabulary, arranging ideas, and re-write sentences is considered paraphrasing the text. (....)
54 There is only one way to backup data using a flash memory. (....)
55 A cell in column C and the second row is called 2C. (....)
56 Strong passwords must be less than 8 characters and include letters, numbers, and special symbols. (....)
57 Phishing is one of the ways by which hackers get your password. (....)
58 To create a formula in Excel, we use the "+" sign. (....)
59 The antivirus can tell you if one of your passwords has been stolen online. (....)
60 Bit is the smallest unit of data. (....)
61 Ethernet is faster and more stable than Wi-Fi. (....)
62 HDMI cable connects computers to the router. (....)
63 One kilobyte equals 1024 bytes. (....)
64 The word "ICT" takes 3 bytes to store. (....)
65 Paraphrasing is using your own style to explain the writer's idea. (....)
66 A router connects multiple devices to the internet. (....)
67 Mbps measures CPU performance. (....)
68 At the beginning of the research report, sources are cited on the "list of cited works" page. (....)
69 LAN connects computers within a home or office. (....)
70 The Internet is an example of a closed network. (....)
71 The antivirus software is not important to be installed on your computer. (....)
72 You can arrange alphabetically numbers only in Excel. (....)
73 The Internet is a safe place to share personal information. (....)

74 The more you share your personal information, the higher your digital security. (....)

75 Phishing is sending a message via email. (....)

76 The last part of the URL is the file path. (....)

77 One of the ways to secure your personal identifiable information is to limit personal information your share on the internet. (....)

78 Multi-Factor Authentication is providing one way to identify yourself. (....)

79 The rows in Excel are labeled with letters. (....)

80 A password manager software creates weak passwords. (....)

Answers

1

1 b	2 c	3 d	4 d	5 a	6 a	7 a	8 d	9 b	10 b
11 b	12 d	13 d	14 b	15 b	16 a	17 d	18 b	19 b	20 b
21 a	22 b	23 b	24 b	25 c	26 c	27 b	28 d	29 c	30 a
31 c	32 b	33 a	34 b	35 d	36 b	37 a	38 b	39 b	40 b
41 b	42 a	43 d	44 b	45 c	46 b	47 b	48 d	49 c	50 a
51 d	52 c	53 b	54 c	55 a	56 c	57 c	58 a	59 b	60 b
61 c	62 a	63 c	64 a	65 b	66 d	67 d	68 d	69 d	70 c

2

1 F	2 F	3 T	4 F	5 T	6 F	7 T	8 T	9 T	10 F
11 F	12 T	13 T	14 F	15 T	16 T	17 T	18 F	19 T	20 F
21 T	22 T	23 F	24 T	25 T	26 T	27 T	28 F	29 T	30 T
31 T	32 T	33 T	34 T	35 F	36 T	37 F	38 T	39 T	40 T
41 T	42 F	43 T	44 F	45 T	46 T	47 T	48 T	49 T	50 F
51 F	52 T	53 T	54 F	55 F	56 F	57 T	58 F	59 F	60 T
61 T	62 F	63 T	64 T	65 T	66 T	67 F	68 F	69 T	70 F
71 F	72 F	73 F	74 F	75 T	76 T	77 T	78 F	79 F	80 F